

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
ON APPEAL BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

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In re Patent Application of:  
John Hevesi et al.

Appellants: John Hevesi and Steve Horvath

Application No.: 10/822,159

Confirmation No.: 2644

Filed: April 12, 2004

Art Unit: 3617

For: PADDLE BLADE, SHAFT AND GRIP

Examiner: Edwin L. Swinehart

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPELLANTS' APPEAL BRIEF**

Dear Commissioner:

This brief is filed more than two months after the Notice of Appeal filed in this case on July 17, 2009, and is in furtherance of the Notice of Appeal.

The fees required under 37 C.F.R. §41.20(b)(2) and 37 C.F.R. §1.136(a), and any required petition for extension of time for filing this brief and fees therefore, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

Appellants' attorneys respectfully solicit the Board to remand this case to the Examiner with instructions to allow the case pursuant to 37 C.F.R. §1.197(a).

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: February 17, 2010      Signature: /s/Helen Davis/

This brief contains, under the appropriate headings and in the order indicated, the following items as required by 37 C.F.R. §41.37(c)(1):

- I. REAL PARTY IN INTEREST
- II. RELATED APPEALS AND INTERFERENCES
- III. STATUS OF CLAIMS
- IV. SUMMARY OF THE AMENDMENTS
- V. SUMMARY OF THE CLAIMED SUBJECT MATTER
- VI. GROUNDS OF REJECTION TO BE REVIEWED IN APPEAL
- VII. ARGUMENT
  - A. REJECTION OF CLAIMS 1 – 4 UNDER 35 U.S.C. §103(A)
- VIII. CLAIMS APPENDIX
- IX. EVIDENCE APPENDIX
- X. RELATED PROCEEDINGS APPENDIX

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## OUTLINE OF APPEAL BRIEF

### I. REAL PARTY IN INTEREST

The real party in interest for this appeal is John Hevesi and Steve Horvath. A full list of inventors is John Hevesi and Steve Horvath.

### II. RELATED CASES AND INTERFERENCES

A Pre-Appeal Brief conference was held where it was determined that the application is still under appeal as there is at least one actual issue for appeal.

There are no other appeals, interferences, judicial proceedings or continuing applications or requests for continued examination which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

### III. STATUS OF THE CLAIMS

Claims 1 – 22 were originally filed in this application. In a response dated December 26, 2006, Appellants canceled claims 11 – 17. In a response dated December 16, 2008, Appellants canceled claims 2 and 19. Claims 1, 3 – 10, 18, and 20 – 22 are pending in this application. Appellants appeal claims 1, 3 – 10, 18, and 20 – 22.

In a Final Office Action dated January 22, 2009, the Examiner rejected claims 18 and 20 – 22 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement; rejected claims 18 and 20 – 22 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 6,796,862 (“Abbenhouse et al.”); rejected claims 1, 3 – 6, 9, 10, 18, and 20 – 22 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of U.S. Pat. No. 2,205,769 (“Sweetland”); and rejected claims 7 – 8 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of Sweetland as applied to Claim 1, and further in view of U.S. Pat. No. D320,375 (“Bruce”). Further to the Final Office Action, a Pre-Appeal Brief Request for Review and accompanying Brief was filed July 17, 2009. In a Panel Decision from the Pre-Appeal Brief Review dated July 29, 2009, it was determined that the Pre-Appeal Request was improper. A subsequent corrected Pre-Appeal Brief Request for Review and accompanying Brief was filed September 18, 2009. In a Panel Decision from the Pre-Appeal Brief Review dated November 9, 2009, it was determined that the Pre-Appeal Request was improper. On November 20, 2009, a supplemental

response was filed requesting consideration of the corrected Pre-Appeal Brief Request for Review filed on September 18, 2009. During a subsequent telephone call on January 21, 2010 with the Supervising Patent Examiner, S. Joseph Morano, it was discussed that the corrected Pre-Appeal Brief Request for Review will not be considered by the Pre-Appeal Panel because only one Pre-Appeal Brief Request for Review will be considered.

#### IV. STATUS OF AMENDMENTS

No amendments have been filed since the issuance of the Final Office Action dated January 22, 2009 or the Pre-Appeal Brief Request for Review filed September 18, 2009.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

Appellants' claim 1 is drawn to a paddle including a shaft having a cross-sectional width and at least one recessed portion located on the shaft, the at least one recessed portion being a lesser cross-sectional width than the shaft cross-sectional width thereby creating at least one transverse ridge at the junction of the shaft cross-sectional width and the at least one recessed portion; a blade; and a grip for interlocking in the at least one recessed portion of the shaft, wherein the blade includes (1) a single-piece skeleton having at least three ribs that extend distally from the longitudinal centerline of the single-piece skeleton towards the outer periphery of the blade and ending substantially at the outer periphery of the blade to reinforce the blade both longitudinally and laterally and (2) an outer surface injection molded directly around and enclosing the single-piece skeleton and the at least three ribs, wherein the single-piece skeleton and the outer surface are made of different and/or the same molded materials, wherein the blade is attached to the shaft, and wherein the at least one recessed portion includes a surface profile, and the grip includes a complimentary surface profile to engage the surface profile of the at least one recessed portion to removably interlock the grip to the shaft.

Additionally, Appellants' claim 18 is drawn to a paddle blade including a single-piece skeleton having at least three ribs that extend distally from the longitudinal centerline of the single-piece skeleton towards the outer periphery of the paddle blade and ending substantially at the outer periphery of the paddle blade; and an outer surface enclosing the single-piece skeleton, wherein the single-piece skeleton and the at least three ribs reinforces the paddle blade longitudinally and/or

laterally, wherein the outer surface is injection molded directed around the single-piece skeleton and the at least three ribs, and wherein the single-piece skeleton and the outer surface are made of different molded materials.

Independent Claim 1:

1. (Previously presented) A paddle (Pg. 4, Lns. 17 – 24; Pg. 6, Lns. 8 – 15; FIGS. 1 – 9) comprising:

a shaft having a cross-sectional width and at least one recessed portion located on the shaft (Pg. 4, Ln. 17 – Pg. 5, Ln. 6; FIGS. 7 – 8), the at least one recessed portion being a lesser cross-sectional width than the shaft cross-sectional width thereby creating at least one transverse ridge at the junction of the shaft cross-sectional width and the at least one recessed portion (Pg. 4, Ln. 17 – Pg. 5, Ln. 6; FIGS. 7 – 8);

a blade (Pg. 2, Ln. 21 – Pg. 4, Ln. 16; FIGS. 1 – 5) and

a grip for interlocking in the at least one recessed portion of the shaft (Pg. 4, Ln. 19 – Pg. 5, Ln. 6; FIGS. 6 – 9), wherein the blade includes (1) a single-piece skeleton having at least three ribs that extend distally from the longitudinal centerline of the single-piece skeleton towards the outer periphery of the blade and ending substantially at the outer periphery of the blade to reinforce the blade both longitudinally and laterally and (2) an outer surface injection molded directly around and enclosing the single-piece skeleton and the at least three ribs, wherein the single-piece skeleton and the outer surface are made of different and/or the same molded materials (Pg. 2, Ln. 21 – Pg. 4, Ln. 16; FIGS. 1 – 5), wherein the blade is attached to the shaft, and wherein the at least one recessed portion includes a surface profile, and the grip includes a complimentary surface profile to engage the surface profile of the at least one recessed portion to removably interlock the grip to the shaft (Pg. 4, Ln. 19 – Pg. 5, Ln. 6; FIGS. 6 – 9).

### Independent Claim 18

18. (Previously presented) A paddle blade comprising:

a single-piece skeleton having at least three ribs that extend distally from the longitudinal centerline of the single-piece skeleton towards the outer periphery of the paddle blade and ending substantially at the outer periphery of the paddle blade; and

an outer surface enclosing the single-piece skeleton, wherein the single-piece skeleton and the at least three ribs reinforces the paddle blade longitudinally and/or laterally, wherein the outer surface is injection molded directed around the single-piece skeleton and the at least three ribs, and wherein the single-piece skeleton and the outer surface are made of different molded materials (Pg. 2, Ln. 21 – Pg. 4, Ln. 16; FIGS. 1 – 5).

## VI. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

The issues to be reviewed on appeal is whether the final rejected claims 18 and 20 – 22 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement; rejected claims 18 and 20 – 22 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al.; rejected claims 1, 3 – 6, 9, 10, 18, and 20 – 22 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of Sweetland; and rejected claims 7 – 8 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of Sweetland as applied to Claim 1, and further in view of Bruce should be reversed.

## VII. ARGUMENTS

### A. Rejection of claims 18 and 20 – 22 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement

#### 1. Examiner's Position

The Examiner rejected claims 18 and 20 – 22 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, The Examiner states, that no basis exists for claiming "at least three ribs" in claim 18.

#### 2. Appellants' Position

In Appellants' response dated December 16, 2008, this particular claim language was deleted. Therefore, it is believed that Claim 18 is allowable under 35 U.S.C. §112, first paragraph. Claims 20

– 22 depend from previously amended Claim 18 and include all its limitations, therefore they are also believed to be allowable because they are dependent upon previously amended claim 18.

B Rejection of claims 18 and 20 – 22 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al.

1. Examiner's Position

The Examiner rejected claims 18 and 20 – 22 under 35 U.S.C. §103(a), noting with respect:

Abbenhouse et al. discloses a fiber reinforced composite paddle blade having a “skeleton” 75 with two ribs extending towards the periphery, and ending substantially at the periphery as claimed. The skeleton, being of a single piece of foam, is covered top and bottom by a composite skin, and attached to shaft as claimed. The rib may be said to include the form 75, therefore, rib and blade are made of different materials as claimed. Abbenhouse et al. fails to show three or more ribs as now claimed.

Abbenhouse et al. sets forth no criticality for having only two ribs, and therefore it is considered to have been an obvious design expedient to the ordinary routineer working in the art at the time of the invention to provide as many such ribs as desired, for example four. It should also be noted that the present application sets forth no criticality for three ribs.

....

2. Appellants' Position

Appellants submit that the 35 U.S.C. §103(a) rejection of claims 18 and 20 – 22 set forth in the Final Office Action fails to set forth a *prima facie* showing of obviousness for the following reasons.

Respectfully, the Appellants disagree with the Examiner's rejection. The cited reference does not support a *prima facie* case of obviousness. In light of the previously amended claim 18, Abbenhouse et al. does not teach three ribs that extend distally from the longitudinal centerline of the skeleton towards the outer periphery of the paddle blade. Further, Abbenhouse et al. does not teach a paddle blade that has a single-piece skeleton and an injection molded outer surface that encloses and directly contacts the single-piece skeleton. Additionally, Abbenhouse et al. discloses two branches 43 and 44 that “diverge out toward the blade tip 39, but terminate short of the blade tip 39.” (Col. 3, Lns. 18 – 20) As can be seen in Figures 1A and 1B of Abbenhouse et al., the branches do not extend distally from the longitudinal centerline of its body towards the outer periphery of the paddle blade where they end substantially at the outer periphery of the paddle

blade. Thus, these branches do not provide the same magnitude of lateral and longitudinal support to the blade tip and outer tips of the blade as the skeleton and ribs of the present application.

Moreover, Abbenhouse et al. uses an internal foam section to create an outer surface shape during molding. This outer shape is what increases the strength of the final part. Additionally, the internal foam section of Abbenhouse et al. does not carry any load, but rather allows the forming of a cross sectional shape that once molded from composite carries the load placed on the blade during paddling more efficiently than a flatter profile. The central foam component in Abbenhouse et al. is NOT load bearing and provides no increase in strength beyond that of allowing a unique shape to be molded in the outer skin.

Conversely, the present invention provides both the internal and external components that are load bearing. The internal structural skeletal ribs are designed to be a load bearing component that not only provides a unique cross-sectional profile, but also adds to the blade's ability to carry loads beyond those provided only by modifying the outer shape of the component. The present invention's internal ribs are also designed in a way that allows it to be "tuned" in a manner that transmits energy from the outer skin back into the paddle shaft, thus increasing the load bearing capability of both the outer and inner components.

Claim 18 has been previously amended to clarify that the blade has a skeleton that has three ribs that extend laterally from the longitudinal centerline of a single-piece skeleton and that the outer surface is injection molded enclosing the single-piece skeleton. Thus, Abbenhouse et al. does not teach these limitations as disclosed and claimed in the present application. Appellants respectfully submit that this reference does not teach each and every claim element of the Appellants' application as amended herein, and thus does not establish a *prima facie* case of obviousness. Therefore, it is believed that this rejection is overcome and previously amended claim 18 is allowable under 35 U.S.C. §103(a). Claims 20 – 22 depend from and include all the limitations of previously amended claim 18, thus they are also believed to be allowable under 35 U.S.C. §103(a).

C Rejection of claims 1, 3 – 6, 9, 10, 18, and 20 – 22 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of Sweetland

1. Examiner's Position

The Examiner rejected claims 1, 3 – 6, 9, 10, 18, and 20 – 22 under 35 U.S.C. §103(a), noting with respect:

Abbenhouse et al. discloses an inner “skeleton” 75 covered top and bottom by a composite skin, and attached to shaft as claimed. Abbenhouse et al. fails to show a grip as is old and well known in the art.

Sweetland shows the field of the invention, including a reduced diameter cylindrical portion 62, which longitudinally locks a grip therein. Sweetland teaches provision of holes 30 within the handle of the figure 3 embodiment for cooperating with formed “ridges” to secure the handle.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Abbenhouse et al. a grip as taught by Sweetland.

Such a combination would have been desirable at the time of the invention so as to provide a sure grip for the user.

Re “injection molded”, such is method of making, carrying no weight in the claims.

The exact plastic used in the construction is considered to have been an obvious design consideration, providing exactly the results as would be expected. The routineer working in the art would have knowledge of available plastics and their properties, and to choose and substitute known materials to achieve predictable results would not be patentable.

Re “wing-shaped”, such fails to define any specific structure and/or arrangement so as to define over Abbenhouse et al.

Re “at least one rib that extends distally from the longitudinal centerline...”, such fails to define over Abbenhouse, and the illustrated ribs are distant from the centerline, and extend towards the outer periphery.

## 2. Appellants' Position

Appellants submit that the 35 U.S.C. §103(a) rejection of claims 1, 3 – 6, 9, 10, 18, and 20 – 22 set forth in the Final Office Action fails to set forth a *prima facie* showing of obviousness for the following reasons.

Respectfully, the Appellants disagree with the Examiner's rejection. The cited references do not support a *prima facie* case of obviousness. Regarding Abbenhouse et al., the above arguments continue to apply. Regarding Sweetland, it does not teach a blade with a single-piece skeleton that has three ribs that extend distally from the longitudinal centerline of the skeleton to the outer periphery of the blade to reinforce the blade both longitudinally and laterally nor the above amended limitations. Therefore, the combination of Abbenhouse et al. and Sweetland do not teach each and every claim element and limitation as found in the previously amended independent claims 1 and 18.

Moreover, Sweetland teaches various independent interlocks that are specifically designed to resist movement in one plane only. The pins used to hold the grips in place (Figs. 1 – 4) resist movement in a rotational plane around the center axis of the shaft that the grip is wrapped around. The ridge used to hold the grip in place (element 24 of Fig. 3 and element 67 of Fig. 7) resists movement in the long axis plane lengthwise along the shaft to which the grip is mated. This combination of elements only functions properly if both items are used in combination with one another. If the pins are removed, the grip is free to rotate in one direction while if the ridges are removed, the grip is free to rotate in another direction.

Conversely, as argued before, the present invention discloses and claims a unique method of grip interlock that utilizes a single mating surface that incorporates a lock for all axis of available movement. By using a single multi-faceted surface to interlock the gripping member, the present invention resists movement in all planes without the use of pins or ridges. By eliminating the use of pins and/or edges in the underlying structure, the present invention is able to produce a final component that is both stronger and lighter than the design taught in Sweetland. This increased strength comes from the ability to design a mating surface that is free of hard edges.

For the reasons stated above with respect to Abbenhouse et al. in view of Sweetland, and in light of previously amended independent claims 1 and 18, Appellants respectfully submit that these two references do not form the basis of a *prima facie* case of obviousness of independent claims 1 and 18. Therefore, it is believed that claims 1 and 18 are allowable under 35 U.S.C. §103(a). Claims 3 – 6, 9, 10, and 20 – 22 depend from and include all the limitations of previously amended claims 1 and 18, respectively, thus they are also believed to be allowable under 35 U.S.C. §103(a).

D Rejection of claims 7 – 8 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of Sweetland as applied to Claim 1, and further in view of Bruce

1. Examiner's Position

The Examiner rejected claims 7 – 8 under 35 U.S.C. §103(a), noting with respect:

Bruce teaches a bent shaft.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide bent shaft portions to Abbenhouse as taught by Bruce.

Such a combination would have been desirable at the time the invention was made so as to provide a more ergonomic shape.

## 2. Appellants' Position

Appellants submit that the 35 U.S.C. §103(a) rejection of claims 7 – 8 set forth in the Final Office Action fails to set forth a *prima facie* showing of obviousness for the following reasons.

Respectfully, the Appellants disagree with the Examiner's rejection. The cited references do not support a *prima facie* case of obviousness. In addition to the arguments presented herein regarding Abbenhouse et al. and Sweetland, Bruce is a design patent that teaches an ornamental design for a paddle that includes a bent shaft but little else. In addition, Bruce teaches that the offset portion of the shaft incorporates two bends to the shaft at positions internal and external of the gripping section. This places the center axis of the blade behind the user's hand during use. By this arrangement, an amount of torque induced twisting is created due to the fact that the axis of the blade does not meet the center line of the gripping section of the grip. Conversely, the present application discloses and claims in claim 7 an ergonomic shaft and grip design that aligns the center axis of the blade with the center section of the gripping section. This is accomplished in claim 7 by having a shaft that incorporates three bends to allow for the center line of the blade to line up directly with the center point of the gripping section. These three bends are disclosed and found in claim 7, particularly, “...wherein the shaft is bent such that (1) a centerline of a first portion of the shaft is offset from a centerline of a second portion of the shaft by at least one of (i) more than 10 degrees and (ii) less than 17 degrees, and (2) a centerline of a third portion of the shaft bisect the center portion of the first portion of the shaft.” These three bends provide that the center line of the blade lines up directly with the center point of the grip, thus decreasing the amount of torque induced twisting common in the design taught by Bruce.

For the reasons stated above with respect to Abbenhouse et al. in view of Sweetland, and further in view of Bruce, and in light of previously amended independent claim 1, Appellants respectfully submit that these references do not form the basis of a *prima facie* case of obviousness of independent claim 1. Therefore, it is believed that claim 1 is allowable under 35 U.S.C. §103(a). Claims 7 – 8 depend from and include all the limitations of previously amended claim 1, thus they are also believed to be allowable under 35 U.S.C. §103(a).

In *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007), the Supreme Court rejected the rigid formalistic application of the rules of obviousness with respect to the requirement of demonstrating

a teaching, suggestion, or motivation to combine known elements, but it did note several factors that were important in the determination of obviousness:

When it first established the requirement of demonstrating a teaching, suggestion, or motivation to combine known elements in order to show that the combination is obvious, the Court of Customs and Patent Appeals captured a helpful insight. See *Application of Bergel*, 292 F. 2d 955, 956–957 (1961). As is clear from cases such as Adams, a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known. [emphasis added]

The Court also addressed the issue of hindsight:

A fact finder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning. See *Graham*, 383 U. S., at 36 (warning against a “temptation to read into the prior art the teachings of the invention in issue” and instructing courts to “‘guard against slipping into the use of hindsight’” (quoting *Monroe Auto Equipment Co. v. Heckethorn Mfg. & Supply Co.*, 332 F. 2d 406, 412 (CA6 1964))). Rigid preventative rules that deny fact finders recourse to common sense, however, are neither necessary under our case law nor consistent with it. [emphasis added]

Additionally, a rejection based on §103 clearly must rest on a factual basis, without hindsight reconstruction of Appellants' methods based on the prior art. In making this evaluation, all the facts must be considered. The USPTO has the initial duty of supplying the factual basis for its rejection. It may not be because it may doubt that the invention is patentable resort to speculation, unfounded assumptions or hindsight reconstruction to supply its factual basis. *In re Warner*, 154 USPQ 173 (CCPA 1967).

The injudicious statements and hindsight bias warned against by the Court is present in the Examiner's assertions with respect to Appellants' independent claims 1 and 18. Notably, the Examiner has used a “cut and paste” approach to cull those elements of choice in the three references using the Appellants' claims as a roadmap. The Examiner has misapplied the obviousness rejection parameters articulated by the US Supreme Court in the *KSR* decision and has

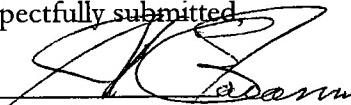
failed to properly illustrate the combination of three separate references and their individual collection of disparate compounds meets the Appellants' claimed paddle and blade as found in claims 1 and 18, respectively.

Appellants believe a five-month extension and fee is due with this brief. If any additional fees are due, please charge our Deposit Account No. 50-0709, under Order No. 022306.0101PTUS from which the undersigned is authorized to draw.

Dated: February 17, 2010

Respectfully submitted,

By:

  
Joseph V. Colaianni  
Registration No.: 20,019  
PATTON BOGGS LLP  
2550 M Street, NW  
Washington, DC 20037  
(202) 457-6174  
(202) 457-6315 (Fax)  
[jcolaianni@pattonboggs.com](mailto:jcolaianni@pattonboggs.com) (Email)  
Attorney for Appellants

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## VIII. CLAIMS APPENDIX

1. (Previously presented) A paddle comprising:  
a shaft having a cross-sectional width and at least one recessed portion located on the shaft, the at least one recessed portion being a lesser cross-sectional width than the shaft cross-sectional width thereby creating at least one transverse ridge at the junction of the shaft cross-sectional width and the at least one recessed portion;  
a blade; and  
a grip for interlocking in the at least one recessed portion of the shaft, wherein the blade includes (1) a single-piece skeleton having at least three ribs that extend distally from the longitudinal centerline of the single-piece skeleton towards the outer periphery of the blade and ending substantially at the outer periphery of the blade to reinforce the blade both longitudinally and laterally and (2) an outer surface injection molded directly around and enclosing the single-piece skeleton and the at least three ribs, wherein the single-piece skeleton and the outer surface are made of different and/or the same molded materials, wherein the blade is attached to the shaft, and wherein the at least one recessed portion includes a surface profile, and the grip includes a complimentary surface profile to engage the surface profile of the at least one recessed portion to removably interlock the grip to the shaft.
2. (Previously presented) The paddle of claim 1, wherein the single-piece skeleton includes a plurality of ribs.
3. (Previously presented) The paddle of claim 1, wherein the at least three ribs has a wing-shaped cross-section.
4. (Previously presented) The paddle of claim 1, wherein the molded material of the single-piece skeleton includes plastic.
5. (Previously presented) The paddle of claim 1, wherein the molded material of the outer surface includes composite materials.

6. (Original) The paddle of claim 1, wherein the shaft is shaped to provide an ergonomic placement and alignment of the grip for a hand of a paddler.

7. (Original) The paddle of claim 1, wherein the shaft is bent such that (1) a centerline of a first portion of the shaft is offset from a centerline of a second portion of the shaft by at least one of (i) more than 10 degrees and (ii) less than 17 degrees, and (2) a centerline of a third portion of the shaft bisect the center portion of the first portion of the shaft.

8. (Previously presented) The paddle of claim 7, wherein the complimentary surface profile of the grip engages the surface profile of the at least one recessed portion at the first portion of the shaft, and wherein the blade is attached to the shaft at the third portion of the shaft.

9. (Original) The paddle of claim 1, wherein the shaft includes a molded composite.

10. (Previously presented) The paddle of claim 1, wherein the complimentary surface profile of the grip engages the surface profile of the at least one recessed portion to also locate the grip, relative to the shaft, in a predetermined orientation and position.

Claims 11 – 17. (Canceled)

18. (Previously presented) A paddle blade comprising:  
a single-piece skeleton having at least three ribs that extend distally from the longitudinal centerline of the single-piece skeleton towards the outer periphery of the paddle blade and ending substantially at the outer periphery of the paddle blade; and  
an outer surface enclosing the single-piece skeleton, wherein the single-piece skeleton and the at least three ribs reinforces the paddle blade longitudinally and/or laterally, wherein the outer surface is injection molded directed around the single-piece skeleton and the at least three ribs, and wherein the single-piece skeleton and the outer surface are made of different molded materials.

19. (Previously presented) The paddle blade of claim 18, wherein the single-piece skeleton includes a plurality of ribs.

20. (Previously presented) The paddle blade of claim 18, wherein the at least three ribs has a wing-shaped cross-section.

21. (Previously presented) The paddle blade of claim 18, wherein the injection molded material of the single-piece skeleton is made from a material selected from the group consisting of plastic and composite materials.

22. (Previously presented) The paddle blade of claim 18, wherein the injection molded material of the outer surface includes a material selected from the group consisting of polycarbonate and composite materials.

## IX. EVIDENCE APPENDIX

None

## X. RELATED PROCEEDINGS APPENDIX

None